



# Federal Emergency Management Agency

Washington, D.C. 20472

## LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	Howard County Maryland (Unincorporated Areas)	NO PROJECT	1D HYDRAULIC ANALYSIS 2D HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 240044		
IDENTIFIER	Tiber Hudson Branch LOMR Remapping	APPROXIMATE LATITUDE AND LONGITUDE: 39.269, -76.810 SOURCE: Other DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM* NO.: 24027C0090D DATE: November 6, 2013 TYPE: FIRM NO.: 24027C0095D DATE: November 6, 2013		DATE OF EFFECTIVE FLOOD INSURANCE STUDY: November 6, 2013  PROFILES: 20P, 85P, 227P, 228P, 229P, 230P, 231P, AND 232P SUMMARY OF DISCHARGE TABLE: 5	

Enclosures reflect changes to flooding sources affected by this revision.

\* FIRM - Flood Insurance Rate Map

### FLOODING SOURCE AND REVISED REACH

See Page 2 for Additional Flooding Sources

Tiber-Hudson Branch - From approximately 140 feet upstream of the confluence with the Patapsco River to approximately 1,960 feet upstream of Frederick Road

### SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Tiber-Hudson Branch	BFEs*	BFEs	YES	YES
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES

\* BFEs - Base Flood Elevations

### DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

Patrick Rick F. Sacchitt, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration

22-03-0019P

102-I-A-C



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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### OTHER FLOODING SOURCES AFFECTED BY THIS REVISION

#### FLOODING SOURCES AND REVISED REACHES

Tiber-Hudson Tributary - From the confluence with Tiber-Hudson Branch to approximately 1,040 feet upstream of Frederick Road  
 Cat Rock Run - From the confluence with Tiber-Hudson Branch to approximately 510 feet upstream of the confluence with Tiber-Hudson Branch  
 New Cut Branch - From the confluence with Tiber-Hudson Branch to approximately 280 feet upstream of the confluence with Tiber-Hudson Branch

#### SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Tiber-Hudson Tributary	BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
Cat Rock Run	BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
New Cut Branch	BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

### COMMUNITY INFORMATION

#### APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

#### COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

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## LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. April Cummings  
Director, Mitigation Division  
Federal Emergency Management Agency, Region III  
One Independence Mall, Sixth Floor  
615 Chestnut Street  
Philadelphia, PA 19106-4404  
(215) 931-5635

### STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

A handwritten signature in black ink, appearing to read "Patrick Rick F. Sacchitt".

Patrick Rick F. Sacchitt, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



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**LETTER OF MAP REVISION  
DETERMINATION DOCUMENT (CONTINUED)**

**PUBLIC NOTIFICATION OF REVISION**

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping website at [https://www.floodmaps.fema.gov/fhm/bfe\\_status/bfe\\_main.asp](https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp).

**LOCAL NEWSPAPER**

Name: *Howard County Times*

Dates: December 9, 2021 and December 16, 2021

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at <https://www.fema.gov/flood-insurance>.

Patrick "Rick" F. Sacchitt, P.E., Branch Chief  
Engineering Services Branch  
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**TABLE 5 – SUMMARY OF DISCHARGES (CONTINUED)**

		PEAK DISCHARGES (cubic feet per second)				
FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	10- Percent- Annual- Chance	2- Percent- Annual- Chance	1- Percent- Annual- Chance	Future 1- Percent- Annual- Chance	0.2- Percent- Annual- Chance
BONNIE BRANCH (CONTINUED)						
Approximately 1,000 feet upstream of Twin Stream Drive	0.37	403	816	1,060	1,060	1,850
CAT ROCK RUN						
At confluence with Tiber-Hudson Branch	0.54	614	978	1,123	*	1,472
At Tiber Falls Drive	0.32	351	711	925	917	1,610
CLARK'S CREEK						
At confluence with Little Patuxent River	3.62	1,070	2,200	2,900	3,670	5,290
Approximately 300 feet downstream of Centennial Lane	3.07	964	1,990	2,640	3,250	4,830
Approximately 1,000 feet upstream of Centennial Lane	2.38	810	1,690	2,240	2,740	4,110
CLYDE'S BRANCH						
At confluence of Stream CB-6	5.93	1,590	3,540	4,820	4,660	9,400
At confluence of Stream CB-12	2.04	809	1,820	2,480	2,690	4,830
At confluence of Stream CB-16	1.28	621	1,390	1,880	1,880	3,630
DEEP RUN						
At confluence with Patapsco River	18.1	2,685	4,882	6,578	7,889	11,225
At Park Circle Drive	8.4	1,837	3,297	4,444	5,333	7,553
At Old Montgomery Road	1.1	745	1,510	1,970	2,040	3,470

<sup>1</sup>Please note that the Summary of Discharges table may not include all flow change locations found in the model

\*Data not available

REVISED TO  
REFLECT LOMR  
EFFECTIVE: April 15, 2022

**TABLE 5 – SUMMARY OF DISCHARGES (CONTINUED)**

		PEAK DISCHARGES (cubic feet per second)				
FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	10- Percent- Annual- Chance	2- Percent- Annual- Chance	1- Percent- Annual- Chance	Future 1- Percent- Annual- Chance	0.2- Percent- Annual- Chance
LAKE ELKHORN BRANCH						
At confluence with Little Patuxent River	3.72	1,950	3,670	4,650	4,650	7,700
At confluence of Lake Elkhorn Branch Tributary 14	2.65	1,550	2,940	3,740	3,740	6,210
Approximately 500 feet downstream of Old Montgomery Road	1.48	1,030	1,990	2,540	2,540	4,280
LITTLE PATUXENT RIVER						
At County Boundary	109.2	11,063	22,903	30,340	31,675	56,061
At confluence of Middle Patuxent River	97.5	10,547	22,028	29,295	30,084	54,481
Approximately 500 upstream of confluence of Stream LPR-1	28.07	5,570	11,200	14,600	14,800	26,100
At State Route 108	21.5	4,380	9,030	11,900	12,300	21,800
At U.S. Route 40	7.13	2,060	4,360	5,810	6,220	10,800
MIDDLE PATUXENT RIVER						
At confluence with Little Patuxent River	57.65	6,411	14,162	19,361	20,543	37,964
At Clarksville Pike	36.92	4,920	9,560	12,300	14,700	21,200
At State Route 32	11.36	2,350	4,710	6,150	7,110	10,900
NEW CUT BRANCH						
At confluence with Tiber-Hudson Branch	1.55	1,975	3,100	3,613	*	4,671
At Private Drive (Station 4924)	0.86	350	745	997	1,730	1,880
At New Cut Road	0.28	174	380	514	787	995

<sup>1</sup>Please note that the Summary of Discharges table may not include all flow change locations found in the model

\*Data not Available

REVISED TO  
REFLECT LOMR  
EFFECTIVE: April 15, 2022

REVISED  
DATA

**TABLE 5 – SUMMARY OF DISCHARGES (CONTINUED)**

		PEAK DISCHARGES (cubic feet per second)				
FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	10- Percent- Annual- Chance	2- Percent- Annual- Chance	1- Percent- Annual- Chance	Future 1- Percent- Annual- Chance	0.2- Percent- Annual- Chance
SUCKER BRANCH TRIBUTARY 1						
Upstream of confluence with Sucker Branch	0.31	347	701	911	923	1,580
SUCKER BRANCH TRIBUTARY 2						
Upstream of confluence with Sucker Branch	0.16	240	478	617	596	1060
TIBER-HUDSON BRANCH						
At confluence with Patapsco River	3.70	3,769	5,403	6,389	*	9,188
Upstream of Maryland Route 29	1.0	1,307	2,049	2,373	*	3,036
Upstream of confluence with Tiber Hudson Tributary	0.53	666	1,102	1,265	*	1,579
TIBER-HUDSON TRIBUTARY						
Entire reach	0.25	428	623	707	*	880
TRIBUTARY TO BEAVER RUN BRANCH						
Approximately 500 feet upstream of confluence with Beaver Run Branch	0.37	367	767	1,010	1,060	1,820
TRIBUTARY TO BONNIE BRANCH						
Approximately 500 feet upstream of confluence with Bonnie Branch	0.45	481	960	1,240	1,240	2,150
Approximately 100 feet upstream of Ellicott Woods Lane	0.25	352	703	908	908	1,560

<sup>1</sup>Please note that the Summary of Discharges table may not include all flow change locations found in the model

\*Data not available

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